

A NEW PTILOMERA FROM THE PHILIPPINES (HEMIPTERA: GERRIDAE)*

By HERBERT B. HUNGERFORD and RYUICHI MATSUDA

No true member of the genus *Ptilomera* has been recorded from the Philippines. Kirkaldy (1909) described a species as *Ptilomera luzonicus* from the Philippines, but placed it in a new subgenus *Rheumatogonus*, which is now recognized as a valid genus, thus leaving the Philippines still without a representative of this easily recognizable genus *Ptilomera*.

While the genus is distinct the separation of species is exceedingly difficult because of sexual dimorphism, occurrence of winged and wingless forms, and great individual variation in structures in both sexes. Some of these difficulties were mentioned by Dr. Esaki in his revision of the *Ptilomera* group (Eos, Revista Espanola de Entomologia III, p. 258, 1927). However, he did no more than list the seventeen species known to him from the literature without making any of them recognizable and overlooked *Ptilomera aëllo* Breddin described in 1906 (Societas entomologica, XXI Jahrgang, April, No. 2, p. 9, April 15, 1906) from New Guinea. Then in 1933 Dr. Lundblad in his splendid "Zur Kenntnis der aquatilen und semiaquatilen Hemipteren von Sumatra, Java und Bali" (Archiv für Hydrobiologie, Suppl. Bd. 12, Tropische Binnengewässer, IV, pp. 371-373, 417-429, 1933) discussed the variations quite fully and gave many illustrations. Of the seventeen species mentioned by Esaki, Lundblad examined the types of thirteen and concluded that there were no more than eleven valid species. He also overlooked *Ptilomera aëllo* Breddin, which would make twelve species in the genus if we accept his synonymy. Then in 1931 Esaki mentioned *Ptilomera shirakii* from Botel-Tobago Island, South Formosa, which escaped Lundblad's paper (1933). This appears to be nomen nudum. None of the descriptions thus far published would fit the description of the three males and one female we recently received from the Chicago Natural History Museum. This species stands quite apart from any other *Ptilomera* species known to us and comes from the Island of Palawan, West Philippines.

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Ptilomera wernerii, n. sp.
(Pl. 1 and Pl. 2, A to E)

Size: Apterous males: 10.9 mm. to 12.6 mm. long; width of head across eyes 1.68 to 1.93 mm.; width across mesoacetabula 3.15 mm. to 3.78 mm. Apterous female: 11.55 mm. long; width of head across eyes 1.76 mm.; width across mesoacetabula 3.36 mm.

Color: Reddish brown above, pale testaceous beneath. Head with two oblique black spots between eyes, clypeus embrowned to black, antennae brownish black. Anterior margin of pronotum between eyes black, front femur with two longitudinal blackish bands. Mesopleura with two black bands separated by a silvery pile, middle and hind femora reddish brown, covered with short black setae; middle and hind tibiae darker.

Structural characteristics: Antennal formula of male holotype: 1st : 2nd : 3rd : 4th :: 315 : 80 : 93 : 60; of allotype :: 240 : 60 : 73 : 50. Head a little longer than pronotum. Beak short, not reaching mesosternum. Male middle femur heavily ciliated ventrally on distal half, bare on basal half; tibia with adpressed hairs beneath. Middle and hind femora with many short black spicules above. Male suranal plate small, with very slight lateral lobes; pygophore with short dorsally directed lateral lobes, ventrally broad with a short caudally directed fingerlike tip. Paramere large, short and bifurcate at tip. Eighth segment of male ventrally with median longitudinal keel with depression on either side. Female with a dorsally directed protuberance on the tip of last abdominal tergite. Connexival spines short, stout, curved, with tips touching each other; upper lateral lobe short and broad; lower lateral lobe lacking; the shape of seventh sternite as shown in plate 2, fig. B and C.

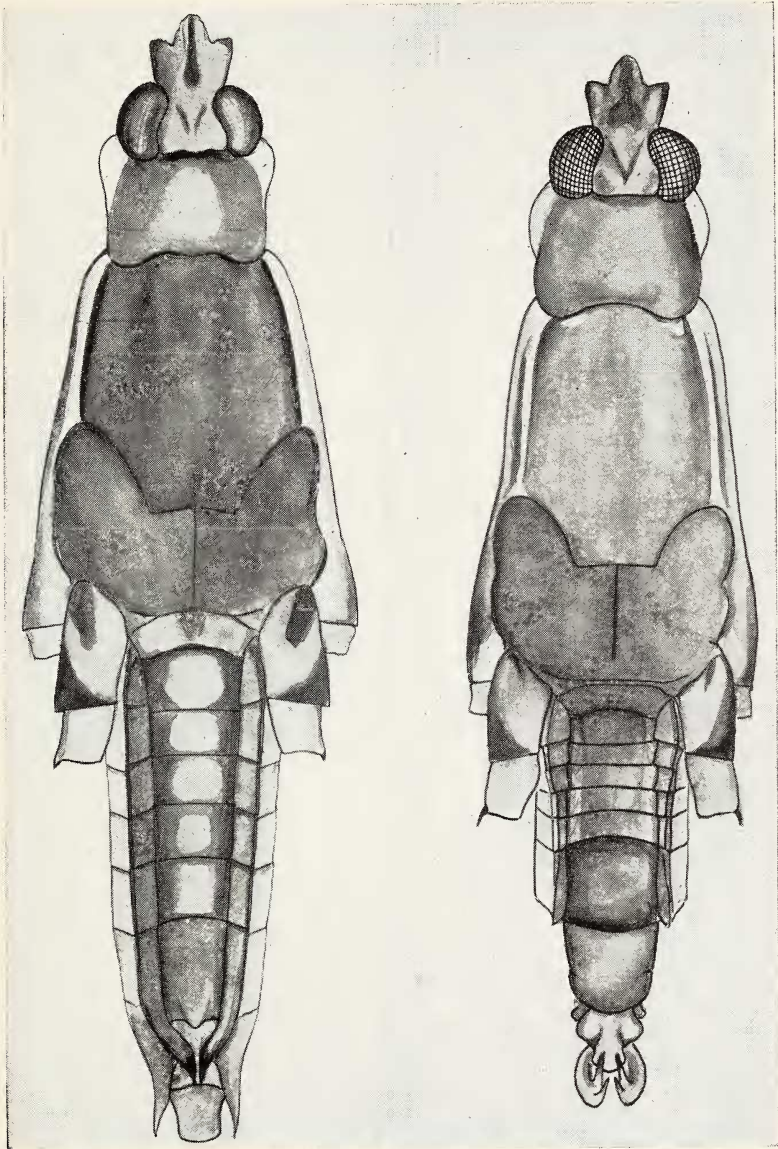
TABLE I. The relative lengths of leg segments of a male.

	Femur	Tibia	1st tarsal seg.	2nd tarsal seg.	Total tarsal length
Front leg	340	310	160	63	223
Middle leg	990	575	265	26	291
Hind leg	1310	?	?	?	?

Location of types: Described from holotype, allotype and two male paratypes bearing the labels "Mountains w. of Lapulapu, Iwahig Penal Colony, Palawan Is. 2,000 to 3,000 ft. III: 1-2, 47" and "CNHM Philippines Zool. Expeditions (1946-1947) F. G. Werner leg.". The types are in the Chicago Natural History

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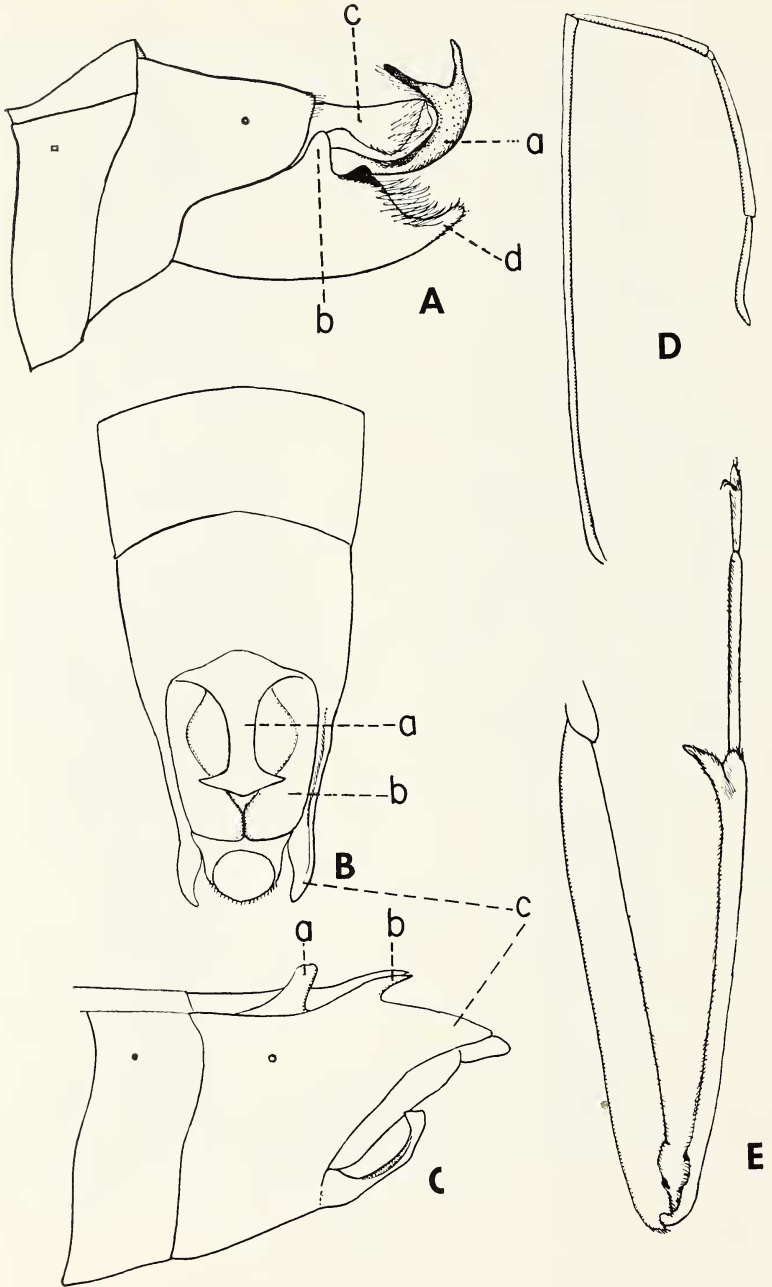
PLATE I



Left. The female of *Ptilomera weneri* Hungerford and Matsuda.
Right. The male of the same species.

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PLATE II



Museum except for one paratype in Francis Huntington Snow Museum, University of Kansas.

Comparative notes: This is the only known species of *Ptilomera* having a bifurcate male clasper and the unique seventh sternite in the female.

EXPLANATION OF PLATE II

A. Lateral view of the male apical abdominal segments: a—The left paramere, b—Dorsally directed lateral lobe of the pygophore, c—The suranal plate, d—Finger-like tip of the pygophore. B. Ventral view of the female apical abdominal segments: a—Prolongation of the seventh sternite, b—lobe of the eighth segment. C. Lateral view of the male apical abdominal segments: a—Dorsally directed protuberance on the seventh tergite, b—The connexival spine, c—Upper lateral lobe of the seventh segment. D. The male antenna. E. The male front leg.

Tingidae are Biters: On a number of occasions, lace bugs have "bitten" me on the arms, hands, chest, neck, face, etc. Most of the irritating bites were made by the nymphs. Occasionally an adult bite has also produced definite irritation. On August 22, 1956, thousands of *Corythucha morrilli* Osb. & D. tingid bugs were swept from rabbit brush, *Chrysothamnus nauseosus*, north of Veyo, Utah. Foliage of the infested shrubs was being severely browned and damaged by this serious bug attack. It was hot and I was perspiring freely. The skin irritation from these bugs was severe and their biting persisted for some time. Hundreds of individuals were scattered over my clothing and skin. Similar annoyance was noted from this same tingid species at Kanab and Santa Clara in Utah, and at Fredonia in northern Arizona, when rabbit brush was swept for insects and the insect catch examined. On another occasion, while collecting very large numbers of tingids and aphids (*Macrosiphum coessigi* K.) from heavily infested and damaged hollyhocks at Richfield, Utah, about 8:30 a.m., I was again severely bitten. The same experience was produced by tingids infesting *Quercus gambelii* foliage in Ogden Canyon, and elsewhere in Utah, on several occasions during summer of 1957.—GEORGE F. KNOWLTON, Logan, Utah.